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ASSESSMENT OF PLANT VARIETY REGISTRATION IN MOLDOVA

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TABLE OF CONTENTS

<u>REPORT SECTION</u>	<u>PAGE NO</u>
1.0 Introduction & Background	1
2.0 Assessment of Existing Conditions	3
2.1. Complexity of variety registration legislation in Moldova	
2.2. Consequences of the Variety Registration System in Moldova	
3.0 Comparing Moldova to the EU System	8
3.1 Plant Variety Registration ≠ Plant Variety Protection	
3.2 A Comparison of Registration & Protection Schemes	
3.3 Plant Variety Registration and Plant Variety Protection in the EU	
3.4 DUS test is the same as for the registration and protection of varieties	
3.5 Registration of plant varieties in Moldova is based on both DUS and VCU tests. In EU VCU is required only for registration of agricultural crops	
4.0 Consultant Recommendations	14
Appendix 1 – Production and Trade Trends in Fruit, Grapes & Vegetables	
Appendix 2 – Consultant’s Presentation for Ministry Officials	

Abbreviations

AGEPI - State Agency for Intellectual Property

ANSA - National agency for food safety

CPVO - Community Plant Variety Office

DUS test - test for **D**istinctness, **U**niformity and **S**tability

MAFI - Ministry of agriculture and food industry (MAFI)

PVP - Plant variety protection

VCU test - test for **V**alue for **C**ultivation and **U**se

UPOV - International Union for the Protection of New Varieties of Plants

1.0 Introduction & Background

ACED has launched an effort to target particular elements of the regulatory environment that undermine the competitiveness of Moldovan HVA value chain. The CIBER (Competitiveness Impacts of Business Environment Reform) process combines value chain stakeholder inputs with rigorous economic analyses to estimate the economic cost of particular elements of the regulatory environment. These estimates serve to prioritize needed reforms, offering substance to the public-private dialogue regarding the sector.

The registration of plant varieties has been identified as one of the major obstacles for the introduction of new varieties in Moldova. The registration process for plant varieties is a procedure which requires time, technical knowledge and staff, both at the level of competent institutions and the growers, in order to fulfill the registration criteria. Rules governing the variety registration process can place a series of small obstacles in the way of market access, which in their combination can delay the flow of innovations to the market.

The system of variety registration in Moldova is based on deep – seated assumptions that are no longer true. They mirror the principles of a centrally planned economy. They emphasize the role of a government commission to decide which varieties are eligible for the growers in Moldova. Real life is organic, adaptable and diverse, and growers are adjusting to it much more quickly than the national administration.

At the same time, without the legal protection of Breeder's Rights, breeders can very soon lose control of the commercialization opportunities for a new variety to persons who have not contributed towards the breeding costs. The development of a new variety is frequently a very long and costly undertaking. By allowing the breeder to control the commercialization rights of the new variety, Plant Variety Rights gives the breeder a chance to recoup his costs and profit from the breeding investment. Also, by providing an incentive to breeders, Plant Variety Protection encourages investment in, and additional efforts, in the plant breeding industry in Moldova.

The rights scheme also allows Moldova to have access to foreign bred varieties that would not be released here by their breeders without the protection of the legislation. The result is that farmers, horticultural producers and home gardeners gain access to an increased number and range of improved varieties. Thus Plant Variety Rights will benefit not only the plant breeders, but also the domestic horticultural producers and the public generally.

The objective of this report is to stimulate and promote changes within the regulatory environment related to the existing system of mandatory testing and registration of

new plant varieties. The current system in Moldova results in significant delays in securing the registration for new varieties which limits the ability of Moldovan producers to switch to new plant varieties in response to market opportunities. During the assignment the main obstacles and inconsistencies in the laws governing the registration of varieties in Moldova were identified and recommendations were prepared based on current EU practices. Recommendations on how to overcome the current situation, to the benefit of producers in Moldova, are provided.

2.0 Assessment of Existing Conditions

2.1. Complexity of Variety Registration Legislation in Moldova

In Moldova, both plant variety protection and plant variety registration are regulated and based on ONE LAW – the Law on Plant Variety Protection (Law on PVP) N39-XVI of February 29, 2008, (Monitorul oficial N99-101/364 of June 6, 2008¹). The Seed Law (No 68 of 2013) which has been in effect since December 21, 2013, also defines the Registry of Plant Varieties and in its final provisions it did not supersede the variety registration provisions of the Law on PVP.

The law on PVP, Article 5, stipulates that the authorities implementing the state policy in the area of **legal protection** of varieties are the State Agency for Intellectual Property (AGEPI) and the State Commission for the Testing of Plant Varieties (hereinafter referred to as “the State Commission”). The State Commission shall be the authority which carries out the testing of plant varieties in its variety testing centers, experimental stations, specialized institutions and laboratories applying methodologies and within the time limits prescribed by international standards, in order to determine their compliance with the conditions of patentability, namely distinctness, uniformity and stability. Contrary to current international, and EU, practices, Paragraph 5 of Article 5 of the Law on the Protection of Plant Varieties **introduces in the regulation two standards that are not related to the protection of varieties, but are exclusively related to the registration of varieties:**

1. “the testing of varieties in order to determine their agronomic value”;
2. “The State Commission shall maintain the Registry of Plant Varieties of the Republic of Moldova (hereinafter referred to as “the Registry of Plant Varieties”), including varieties approved for cultivation and sale in the Republic of Moldova”

Article 5 of the Law on PVP, which regulates intellectual property rights, empowers the State Commission **to regulate the entry into the market of new seeds and planting materials** through the registration of these varieties, with the additional requirement of the VCU test. The Law on PVP, Article 63, authorizes AGEPI to keep the following:

1. The National Registry of Applications
2. The National Registry of Patents, after the decision regarding the grant of a patent is taken

¹ http://agepi.gov.md/pdf/law/l_39_2008-en.pdf (English version)

and in the same Law, Article 66, empowers the State Commission to maintain:

3. The Registry of Plant Varieties

Linking the Registry of Plant Varieties to the Registry of Patents (Protected Plant Varieties) in the PVP Law creates confusion among all stakeholders in the sector. This confusion arises from the fact that those who register a variety in the Plant Variety Registry expect to have exclusivity for its use and reproduction. This is not the case because the variety has exclusivity and it protected only if it is listed in the National Registry of Patents. **While the UPOV Convention requires members of the Union to provide for appropriate legal remedies for the effective enforcement of breeders' rights, it is a private matter for breeders to take action to enforce their rights.**

The official controls, or controls under official supervision, and the rights for the marketing of seeds and planting material for varieties listed in Plant Variety Registry are regulated by the Seed Law. The Seed Law² (Law No 68 of from April 5, 2013, which has been in effect since December 21, 2013) also regulates plant variety testing and registration. According to Article 6, the testing and registration of plant varieties is carried out by the State Commission according national and international methodologies and standards for the value for cultivation and use tests (VCU) and for the distinctness, uniformity and stability tests (DUS). The Seed Law also stipulates that the protection of plant varieties is granted by AGEPI in accordance with the PVP Law, No. 39-XVI.

Article 9 of the Seed Law permits the marketing and cultivation of only those plant varieties that are listed in the Registry of Plant Varieties. Article 11 stipulates that only those plant varieties registered in the catalogue of varieties are allowed to be imported into Moldova. The same article defines the exemptions which allow the import of seeds and planting material, of plant varieties which are not listed in the catalog of varieties, as the following:

- a) scientific research in collaborative relationships between research institutions
- b) official test conducted by the State Commission,
- c) supplementing a variety represented by less 10 varieties in the catalog of varieties with varieties that are Listed on EU Common catalog of plant varieties
- d) organization of demonstration plots on limited surfaces (3 lots up to 1 ha for each variety)
- e) import for multiplication for export.

² <http://lex.justice.md/index.php?action=view&view=doc&lang=1&id=348373>

2.2 Consequences of the Variety Registration System in Moldova

There are a number of negative consequences of the plant variety registration system in Moldova, which limit the ability of the country to be competitive with the countries it competes with, and the ability of local farmers to introduce new fruit varieties. Among these are the following:

➤ **Restricted access to new plant varieties and new technologies reduces the competitiveness of Moldovan producers**

Seeds and propagating materials are cornerstone inputs for modern agricultural production. New varieties of high value crops such as apples, tomatoes and grapes are certainly innovations and new technologies, much the same as the new pesticides, fertilizers and other products that go along with them. New varieties are essential elements for the implementation of new ways of cultivation, the improvement of fruit quality and also for the development of new ways of selling fruit and gaining access to new markets. According to the ACED Value Chain studies, as well as a result of consultation visits with farmers, growers in Moldova do not have easy access to new plant varieties due to the vague, and unnecessarily long, variety registration process.

Despite this factor, fruit and grape producers are finding the ways to access new varieties by importing them under the names of varieties which are listed in Plant Variety Registry, and also through the use of an official procedure based on Ministry approval to introduce a new variety for research purposes based on a contract with an institute, or for “their own” purposes. Bearing in mind fruit, grape and vegetable production and trade trends (Annex 1), and the fact that increases in fruit production and trade are growing faster than world average growth trends, the access to new technologies in fruit production, including access to new plant varieties, is essential to support agricultural development and maintain competitiveness.

➤ **Destroys domestic nursery production and supports imports**

According to the information obtained from ANSA during the consultant’s visit to Moldova, at the present time Moldova is producing about seven million fruit and grape nursery plants per year. If the plant nurseries in Moldova do not have a legal and clear procedure for gaining access to new varieties, the imports of nursery stock will continue to grow in response to market requirements.

➤ **Strengthening dualism – empowering producers with “good” connections and weakening the small farmers**

The present system of registration is legally bound by rules and procedures which, on the one hand, oblige the administration to “choose” varieties and decide what is good and what is not good for producers and thus directly influence production, and on the other hand they can arbitrarily award access to new varieties for some

producers. The existing situation will continue to create a widening dualism between growers which have good relationships with the Ministry or the Commission and the smaller rural farmers who do not know all of the “practical” steps they can use to overcome the import hurdles.

Also, the present practices being used to overcome the plant variety registration obstacles are empowering those farmers which are ready to use any means they can to “overcome” the procedures and weaken the market position of those who respect the laws and procedures.

➤ Compromising the establishment of a certification system

The registration of plant varieties consists of two steps – listing the varieties in the Registry based on an identity check, and official controls. It implies that the variety registration is the base of the certification system of seeds and planting materials. Certification and inspections guarantee the identity, health and quality of seeds and propagating material before they are allowed on the market. There are very strong ongoing efforts in ANSA to improve the seed certification system. ANSA recently updated the regulation, updated the forms, the inspectors have received good training and there are ongoing seminars to upgrade inspector skills.

The major problem for ANSA is the fact that national Registry of Plant Varieties does not correspond to the situation in the field. There are many varieties in production in Moldova which are not present in the registry. ANSA sent a letter to MAFI, in December 2013, asking for an opinion on legalizing the status of 50 varieties and rootstocks with a request for variety descriptions and listings in the National Registry. The Commission has refused this request. If the present system of registration continues to motivate the import and use of planting material, using the names of varieties which are listed in registry, this can compromise the certification scheme for seeds and planting materials, as well as the implementation of the Seed Law.

➤ A potential threat for the Moldovan phytosanitary system

Important processes in the quarantine regulations in the Moldovan phytosanitary system are at risk, such as identification, assessment and management. The susceptibility of plant varieties differs, and diseases can be latent, etc. - thus the import of planting material under false names represents a serious attack on, and risk to, the phytosanitary system in Moldova.

➤ Violations of plant breeder's rights

Protecting a new plant variety entails granting exclusive rights for the exploitation of the variety and it provides the breeder with an opportunity to enforce his rights through the judicial system. In Moldova, AGEPI is providing the patent (license) for the plant breeder's rights. Confusion has been caused by existence of two Registries

under the Law on PVP – one registry for plant variety patents (securing the exclusivity for the breeder) and a second registry for plant varieties for marketing purposes. This dualism is creating great confusion in the system because the registry of plant varieties is not providing exclusivity to the importer. This situation, in addition to the ongoing importation of varieties with false names, is making the PVP system in Moldova very vulnerable.

3.0 Comparing Moldova to the EU Systems

3.1 Plant Variety Registration ≠ Plant Variety Protection

The plant variety registration and protection system is based on two independent, but inter-related, systems of regulations and procedures which are based on:

1. Seed and planting material marketing, and
2. Intellectual property rights (ie: the plant breeder's rights, or PBR).

Furthermore, the registration of seeds and planting material is based on:

1. National, or international, lists (catalogs, Registries) of plant varieties, and
2. The certification/inspection of individual seed and planting material lots.

The implementation of the procedures and regulations concerning the registration of seeds and planting material varieties are guarantees for the identity, clarity and the health status of these materials, which are one of the most important inputs for agricultural production.

3.2 A Comparison of Registration & Protection Schemes

Plant variety registration	Plant variety protection
Based on regulations regarding the marketing and certification of seeds & planting material	Based on the regulation of individual plant varieties and plant breeder's rights
The <u>public right or property right</u> guarantees food safety and quality via registration	The <u>intellectual rights or property rights</u> guarantees exclusive rights of ownership (similar to those for other creations and inventions, etc.)
World Trade Organization	
SPS	TRIPS
Agreement on the Application of Sanitary and Phytosanitary Measures	Agreement on Trade Related Aspects of Intellectual Property Rights
European Union	
Basic Council Directives One horizontal Directive on the Common Catalogue of varieties of agricultural plant species and 11 vertical Marketing Directives, among which there are five seed Directives (fodder plant seed, cereal seed, beet seed, seeds of oil and fibre plants and vegetable seeds), three plant propagating material Directives	Community legislation 2100/94

(vine propagating material, seed potatoes and vegetable reproductive material other than seeds) and three directives that cover both seed and propagating material (fruit plant propagating material, ornamental plants and forest reproductive material)	
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3.3 Plant Variety Registration and Plant Variety Protection in the EU

Seeds and planting material are agricultural inputs of major importance for the productivity and quality of agricultural production. This fact was recognized in the national legislations of the EU countries from XIX century, and in EU legislation from the 1960s. Productivity is based on two main elements: varieties should be of good quality and identifiable, and seed and planting material lots brought to the market should be in such a condition so the growers have a guarantee of the identity.

Plant Variety Registration	Plant Variety Protection
Plant variety registration is a pre-condition for the certification of seeds. The common catalogues of the varieties of agricultural plants and vegetable species lists the varieties which can be marketed in the EU. Catalogues are based on the registration of plant varieties in individual EU countries after they have been technically examined there and notification has been provided to the Commission. They are then published in the Official Journal.	A separate system, for the protection of plant variety rights, was established by Community legislation 2100/94. The system allows for intellectual property rights, which are valid throughout the Community, to be granted for plant varieties. Protecting a new plant variety entails granting exclusive rights for the exploitation of the variety. The protection system is technically and legally complex, but the application procedure is simple. The Community protection system, which is managed by the CPVO, provides added value in the sense that breeders can get a return on their investment throughout the entire European Union. All botanical taxa are eligible for protection.
There are common catalogs for agricultural crops (2002/53/EC), vegetable crops (2002/55/EC), and an <u>EU list of varieties of vine propagation material</u> . There is no common catalogue for fruit varieties in the EU.	Community legislation 2100/94

<p>General principles of EU legislation are:</p> <ol style="list-style-type: none"> 1) Plant varieties are listed in National Catalogues, and then in the EU (Common) catalogue (these are for agricultural and vegetable crops to be marketed). The purpose of the registration of varieties is to be sure that the characteristics are clearly identified. In order to be listed the varieties have to be Distinct, Uniform and Stable (the DUS test for identity). 1) Lots of seed and other propagating material are subject to certification on the basis of official testing, or testing conducted under official supervision. 2) The registration of suppliers. 	<p>The steps in applying for Community Plant Variety Protection³ are:</p> <p>Step 1: Filling in an application form - The applicant files an application for protection</p> <p>Step 2: Checking an application - The services of the CPVO check that it is complete and eligible. If no obstacle prevents a grant of Community protection, the CPVO takes the necessary measures to organize the carrying out of a technical examination of the candidate variety.</p> <p>Step 3: Technical examination - The aim of this step is to verify that the variety is Distinct from other varieties, Uniform in its characteristics and Stable in the long run (DUS).</p> <p>Step 4: Variety Denomination</p> <p>Step 5: Grant of the variety title</p>
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3.4 DUS test is the same for the registration and protection of varieties

Both variety registration and variety protection are based on the DUS test. In the EU the DUS test is obligatory for all varieties which are included in National and the EU Common Catalogue. Agricultural crops must also be tested for their **V**alue for **C**ultivation and **U**se (VCU test). The plant variety protection *acquis*, and the seed and planting material Directives, have DUS testing requirements in common, although there is a different legal basis for the use of this test in the two cases. The legal base for the Common Catalogues Directives is Article 37 of the Treaty establishing the EU, whereas Council Regulation (EC) 2100/94, which defines the Community PVR rules, is Article 235 of the same Treaty which established the EU.

The DUS test guidelines are based on the UPOV Convention. The UPOV Convention is entirely concerned with plant variety **PROTECTION (not registration)**. The UPOV Convention provides the basis for member states to support and encourage plant breeding by granting an intellectual property right to the breeders of new plant varieties, ie: the plant breeder's rights. IN THE CASE that a variety is protected by plant breeder's rights, the authorization of the breeder is required for anyone wishing to propagate the variety for commercial purposes. The breeder's right is granted by the individual UPOV members.

³ www.cpvo.europa.eu – The Community Plant Variety Office, based in Angers, France.

According to Article 7 of the 1961, 1972 and 1978 Acts, and Article 12 of the 1991 Act of the UPOV Convention⁴, protection can only be granted for a new plant variety after an examination of the variety has shown that it complies with the requirements for protection laid down in those Acts and, in particular, that the variety is **Distinct (D)** from any other variety whose existence is a matter of common knowledge at the time of the application, that it is sufficiently **Uniform (U)** and that it is **Stable (S)**.

The examination, or "DUS Test," is based mainly on growing tests, carried out by a competent authority which can grant plant breeders' rights, or by a separate institution such as public research institutes, acting on behalf of that authority or, in some cases, on the basis of growing tests carried out by the breeder. The examination generates a description of the variety, using its relevant characteristics (e.g. plant height, leaf shape, time of flowering, etc).

The DUS test (Distinct, Uniform and Stable) is a test for proving the IDENTITY of a specific variety. The DUS test is a basis for both variety registration and for variety protection.

In the EU, the CPVO role encompasses the plant variety rights system. The stakeholders should keep in mind the difference between **plant variety rights** and **plant variety marketing**. CPVO manages the EU **intellectual property rights system** for new plant varieties. CPVO is currently only responsible for the granting of intellectual property rights for plant varieties – **the granting of this intellectual property right for a new variety is entirely independent from granting the rights to market the new variety**.

After an application has been submitted, the CPVO first studies the administrative file, including the payment of fees, and whether the variety is in fact novel with regard to previous marketing. If no formal impediment is found for granting protection, the CPVO arranges for a technical examination of the variety submitted. The purpose of this examination is to ensure that the criteria of distinctness, uniformity, and stability are complied with. The technical examination is entrusted to Member State competent bodies (examination offices) or carried out in cooperation with third countries. CVPO performs verification of the technical competence of the staff in institutions that perform variety testing annually.

Each institution which performs variety testing for the CVPO may submit a request for a change, or an extension of the scope of variety testing, that they perform. The CPVO has developed detailed protocols on testing of plant varieties. In order to test the varieties the institutions need to have especially trained personnel, have formed a

⁴ http://www.upov.int/en/publications/tg-rom/tg001/tg_1_3.pdf

reference collection of varieties, have determined the characteristics of the variety under test and, specifically, made comparative tests in experimental fields. In making their decisions they must use appropriate reference collections of varieties from which there is a comparison of varieties in the DUS tests. These are very serious tests and these operations must be carried out very professionally. In addition to the technical requirements, a variety must be identified by a variety denomination. To be approved, a variety denomination must fulfill several criteria that ensure a clear and unambiguous identification.

3.5 The Registration of plant varieties in Moldova is based on both the DUS and VCU tests. In the EU the VCU test is only required for the registration of agricultural crops

The EU common catalogues of the varieties of agricultural plants and vegetable species lists the varieties which can be marketed in the EU. These catalogues are based on the registration of plant varieties in individual EU countries after they have been technically examined in each country, and their registration is notified to the Commission. They are then published in the Official Journal. Variety registration is a pre-condition for the certification of seeds. The EU member countries are regulating their National Lists of plant varieties based on the DUS and VSU tests (for agricultural crops), and the DUS test, and then a post registration, *or voluntary, VCU test for vegetables, grapes and fruit plant varieties*.

To be listed in the registry of plant varieties in Moldova, according to the both Laws, varieties must meet the standards on **D**istinctness, **U**niformity and **S**tability (the DUS test), and for **agricultural crops** the standards contained in the **V**alue for **C**ultivation and **U**se test (the VCU test).

The DUS test is required for all new varieties to be admitted in the registry of plant Varieties. Based on Government decision No 43, from January 15, 2013, field crop varieties are permitted in the catalog if one of the member states of the European Union, or a member of UPOV, and a DUS test conducted by a competent national authority in one of those countries will be recognized as such. The DUS test for horticultural species and grape vines conducted in a European Union country, or in a member of UPOV, have to be validated by the State Commission. In Moldova, the State Commission is not organizing and performing the DUS test for fruit varieties. The State Commission is issuing CPVO confirmations for DUS tests performed elsewhere and charging a fee to the applicants.

The VCU test value is based on crop yields, the resistance for harmful organisms, the response to the environment and other quality characteristics. Government Decision

No. 43, of January 15, 2013 and amended on December 4, 2013, stipulates that the VCU tests are necessary for all new varieties and foreign crops for their admission into the Registry of Plant Varieties. The tables below compares the test requirements for various types of crops within the European Union and Moldova.

European Union			
Agricultural crops	Vegetables	Grapes	Fruit
DUS VCU National Catalogue List EU Common catalogue list	DUS National Catalogue List EU Common catalogue list	DUS National Catalogue list EU list of varieties of vine propagation material	DUS National Catalogue List
Moldova			
Agricultural crops	Vegetables	Grapes	Fruit
DUS VCU National Catalogue List	DUS VCU National Catalogue List	DUS VCU National Catalogue List	DUS VCU National Catalogue List

4.0 Consultant Recommendations

Following a ten day visit to Moldova, and after numerous meetings with Ministry of Agricultural officials, and others involved in the plant variety registration system, the consultant would like to offer the following recommendations for consideration by those involved with the Plant Variety Registration system in Moldova.

➤ For the Ministry of Agriculture (MAFI): Take decisive action

Recommendation 1: Resolve the situation with varieties that are already present in production in Moldova

In order to respond to changes in the market, to support farmers and producers to adopt innovations that will improve their market position, to protect producers of fruit and grapes from planting material with uncertain variety labels and from large economic losses due to investments made over the past several years, the implementation of legal and practical structural changes is necessary to approve the introduction of new varieties of fruit trees and grape vines in order to allow farmers to have access to new technologies. Complexity, rigidity and the fragmentation of the legislation regulating plant variety registration need to be solved by amending the Law on PVP with the elimination of the provisions within this law on the registration of plant varieties, which deal with the protection of intellectual property.

But a simple amendment of the legislation will not solve the problem by itself. MAFI needs to confront the fact that varieties that are not in the plant variety registry are present in the country, and are being propagated on farms and nurseries in Moldova. In order to legalize the existing situation with this production MAFI should take over the role of initiator and/or maintainer of all the fruit and grape varieties that are in production, or being multiplied in Moldova. The MAFI can then contract with the Institutes, or the Grower associations, as the maintainers of these new varieties. The consultant recommends the following steps to complete this process:

- Step 1: Check the status of variety protection for all varieties in production in Moldova via communication with the CPVO and/or UPOV.
- Step 2: List in the Moldova Catalogue plant varieties which are not protected
- Step 3: Contract the growers which are ready to maintain the varieties
- Step 4: In the case where a variety is protected – MAFI should contact the owners of the protected varieties and support the protection of these varieties via AGEPI if the breeder/owner expresses his willingness to protect the variety in Moldova, and support the negotiations between

the breeders and the growers ready to be the exclusive representatives for the protected varieties.

Step 5: Support ANSA inspection of seeds and planting material to prevent the cultivation and propagation of planting material varieties which are protected by AGEPI but which are being used without a contract with the breeder/owner of the protected variety.

Experience of new EU member states shows that identified crops and/or orchards with protected varieties were not destroyed, but that if no agreement is reached with the holders of the breeders rights from the EU, then the competent court dealt with the issue. Of course, at the day of accession to the EU they would not immediately initiate court proceedings, but it was left to the breeders to reach agreements with the users of such varieties before the start of court proceedings.

Fees (royalties) are usually not large and they are regulated through a system of certification of reproductive material and are included in the price of intermediate goods. In the case of horticultural plantations there was a transition period for royalty payments. The period during which the variety is protected is long, and it is usually between 25 to 30 years. CVPO statistics shows that over 60% of the EU protected varieties are ornamental plants and flowers, and vegetable crops are about 20%.

Recommendation 2: Harmonize the legislation with international standards

In order to harmonize the local legislation with international standards on plant variety registration the consultant recommends the following steps to complete this process:

Step 1: Liberalize the introduction of new varieties in Moldova by stipulating that only administrative procedures are needed for fruit, grapes and vegetables, which fulfill all plant health standards as well as those respecting the plant breeder's rights, to be registered. Allow these varieties to be planted immediately after their listing in the registry. The ADMINISTRATIVE entry into the registry of varieties for tree fruit, grapes and vegetables needs to be simplified through approving the application for admission into the Registry with only the provision of two supporting documents, as follows:

- 1) An application form for registration of a plant variety in the Registry; and
- 2) The description of the variety in accordance with the UPOV approved descriptors.

The individual seeking to register a new variety should also submit an authorization from the owner of the variety that stipulates that it can be entered into the Moldovan Registry of Varieties. If the variety is protected, the owner of the variety should also transfer rights for the multiplication of the planting material to the applicant for registration in Moldova. The application should be accompanied by a copy of the license translated into Moldovan language.

Step 2: MAFI should consider removing the provisions on plant variety registration from the Law on Plant Variety Protection by regulating the registration of plant varieties, and post registration examinations for the list of recommended varieties.

Recommendation 3: Protect and respect plant variety breeder's rights

The new simplified procedure of registration in the Registry of Varieties will allow the easy introduction of new varieties. However, in accordance with the Law on Plant Variety Protection, some of the new varieties are protected by the *sui generis* right, or patent license, by the breeder or owner of the variety. Moldova is obliged by the UPOV Convention to not allow the propagation of planting material of protected varieties if the transfer of the rights for reproduction are not agreed to with the owner of the variety. This means that nurseries cannot multiply planting material for protected varieties before they have a formal legal and financial relationship with the holder of the breeder's rights, or with the owner of the variety.

This is accomplished through the option that the breeder (or owner) completely or partially transfers or sells the rights to reproduction of the planting material of protected varieties through licenses which define the extent of the rights, the time at which the right to multiply is transmitted and the fee for the commercialization of protected varieties, etc. The owner of the variety may initiate prosecution against any person who, without authorization, multiplies planting material of the protected variety and/or misuses the name of the protected variety.

To allow the reproduction of planting material of protected varieties and to discourage the multiplication of planting material of these varieties by unauthorized persons, the applicant for the registration of a variety in the Registry of Plant Varieties needs to submit a photocopy of the license documenting that he has purchased the right of reproduction for the planting materials. The same document should be submitted into the annual database maintained by ANSA when applying for nursery production, thus enabling smooth production (in the legal sense) and he can then obtain labels for the planting material that shows that he has procured the rights for reproduction from the owner, and all other producers who do not have a license cannot get official permission from ANSA so their production would be illegal.

Recommendation 4: **Make a clear distinction between the registration of varieties for patent purposes (protection of the plant breeder's rights) within the jurisdiction of AGEPI and the registration of varieties for marketing within the jurisdiction of MAFI (State Commission).**

MAFI should consider removing the provisions on plant variety registration from the Law on Plant Variety Protection since they already contained are in the Seed Law. In this way, the Registry of Plant Varieties will be separated from the Registry of PROTECTED Plant Varieties and they will be not be regulated by the same legal act as is the case at the current time.

Recommendation 5: **Initiate substantial changes to the purpose of testing varieties from so called “protecting the producers” to “support for producers”**

Step 1. Change the role of the State Commission to that of plant variety registration

The State Commission for plant variety registration will keep its role as a technical body for the registration of agricultural crops organizing and performing DUS and VCU tests. Also it will administer the registration of fruit, grape and vegetable varieties. The State Commission can also assume the role of building the network of post registration experimental fields.

Step 2: Build the network of production fields, and the experimental fields of the research stations, the extension service, growers and growers associations to provide recommendations to farmers based on the variety's performance in different growing regions.

Tests of the new varieties can be done AFTER their administrative entry into the Registry of Plant Varieties and their introduction into production by producers. The varieties can then be tested in production settings and their value for cultivation can be determined in this way in order to **provide recommendations for the growing**. Tests for recommendation purposes can be performed in several experimental testing centers within the fruit-growing region. The goal should be to test varieties in all of the growing regions for fruit and grapes, especially where there is an expansion of production underway. This means that examining certain varieties of species will involve only regions that have an interest in that given type of production.

To adopt appropriate recommendations for the cultivation of these varieties by region, the basic characteristics of the varieties can be collected in production

centers by gathering data from the productive plantations whose primary purpose is not experimental but the commercial production of fruit or grapes. In order to test varieties MAFI can invite all of the interested fruit and grape producers to become involved in a network of experimental and production testing of varieties. Based on these tests, MAFI in cooperation with the scientific community and farmers organizations, can produce a list of recommended varieties.

➤ **For the Fruit Grower Associations**

Recommendation 1. Support MAFI to implement the changes in the legislation and separate variety registration from the protection of plant varieties

Recommendation 2. Organise seminars for growers on the performance of new varieties, but also on the legislation for plant variety protection and the consequences which would come from disregarding Plant Breeders Rights.

➤ **For the ACED Project**

Recommendation 1: Support the establishment of a certification scheme and official control procedures for fruit and grapes

The ANSA department for the certification of seeds and planting material is establishing the procedures for planting material certification which will be documented by a certificate (label). Certificates (labels) placed on planting stock are a guarantee for the identity, purity and health status. The certification system depends greatly on the correct variety registration, and it is also the only system which can guarantee to the producer planting material conformity to type and its health status.

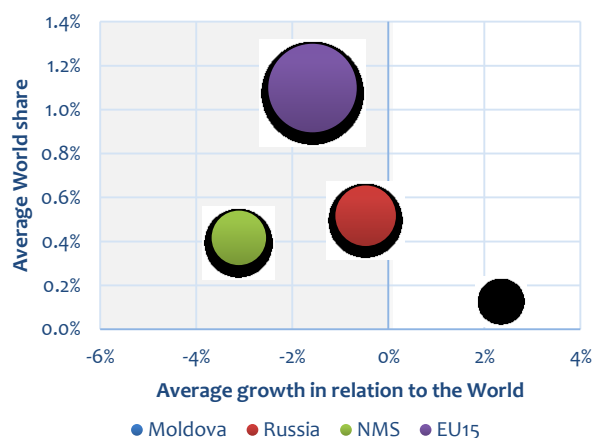
Taking into account the fact that quality planting material is a basic input for production, and that the choice of variety is one of the most important elements for marketing the production, all efforts made at this stage of regulation implementation will contribute to the modernisation and improvement of sector.

Step 1. Investigate the presence of fruit and grape varieties which are not in the Registry of Plant Varieties, or which are present on the temporary list.

- Step 2. Support ANSA and MAFI to clearly separate the varieties which are protected from varieties which are not protected and which can be included in the Registry of Plant Varieties
- Step 3: Support the inspectorate with clear descriptions of the plant varieties, accompanied by a complete set of pictures including: fruit at ripeness, leaf, bark of the young trees, etc.
- Step 4: Organise seminars for nurseries promoting the certification scheme and increase the awareness of producers of the importance of plant material certification for their products with the official controls and the protection of plant breeder's rights.

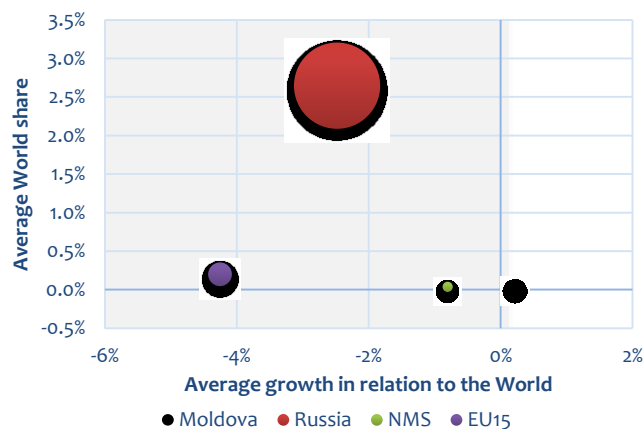
Appendix 1 – Production and Trade Trends in Fruit, Grapes & Vegetables

Fruit production trend in Moldova and related countries (2006-2011)

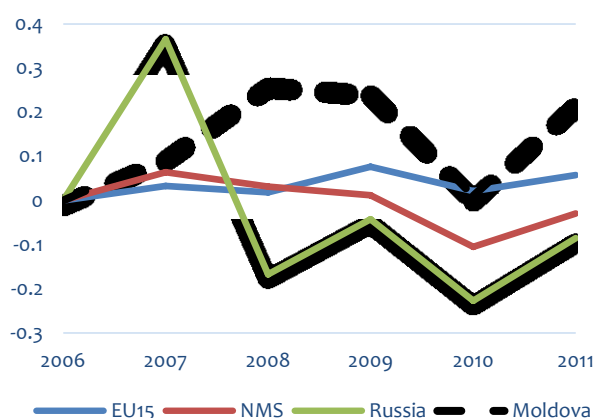


Source: FAO

Vegetable production trend in Moldova and related countries (2006-2011)

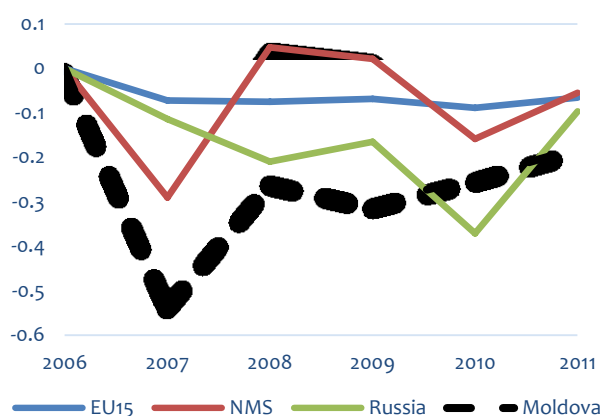


Fruit production trend in selected countries (2006=0)

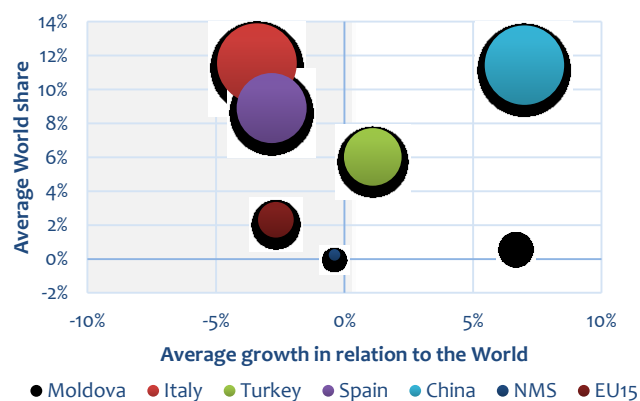


Source: FAO

Vegetable production trend in selected countries (2006=0)

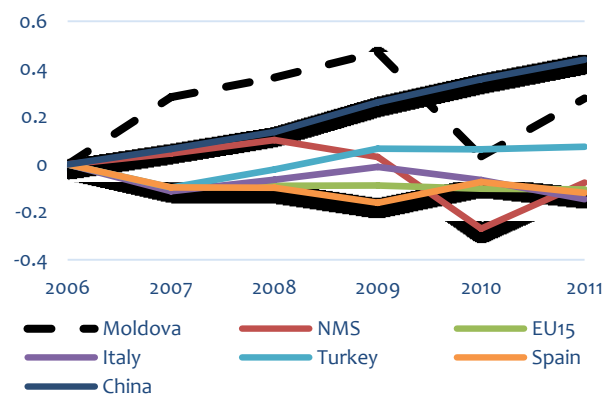


Grapes production trend in Moldova and related countries (2006-2011)

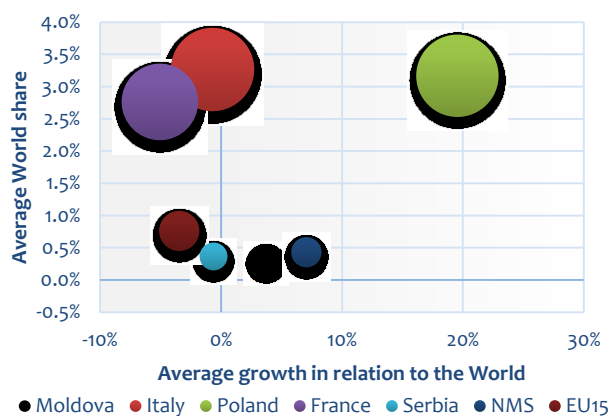


Source: FAO

Grapes production trend in selected countries (2006=0)

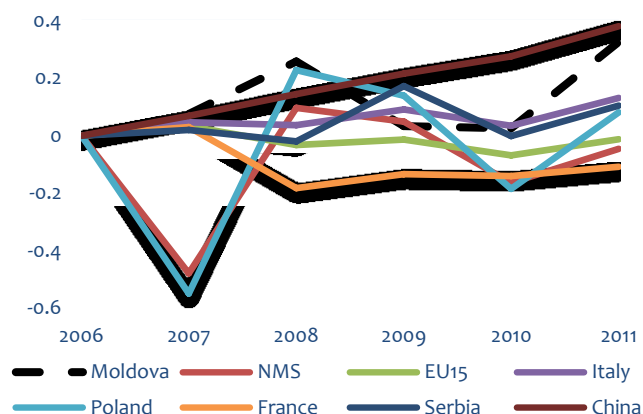


Apples production trend in Moldova and related countries (2006-2011)

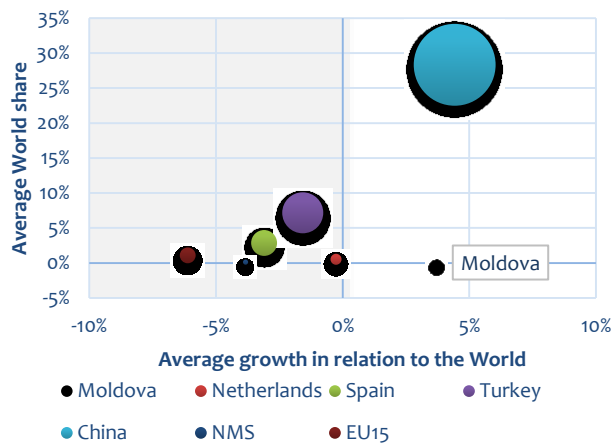


Source: FAO

Apples production trend in selected countries (2006=0)

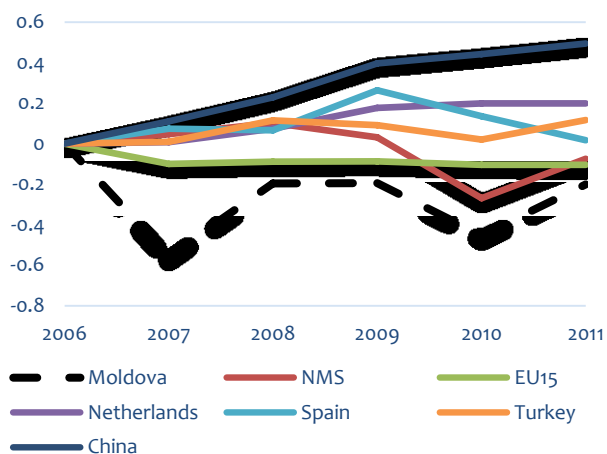


Tomatoes production trend in Moldova and related countries (2006-2011)



Source: FAO

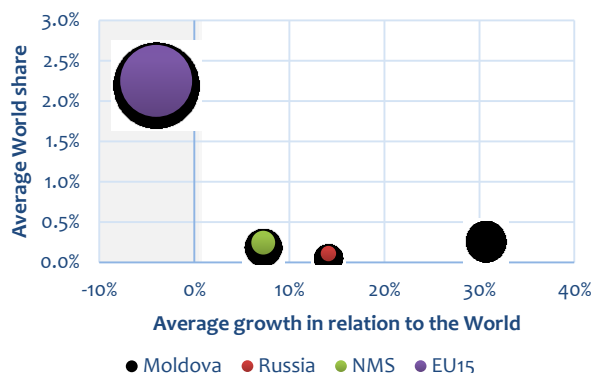
Tomatoes production trend in selected countries (2006=0)



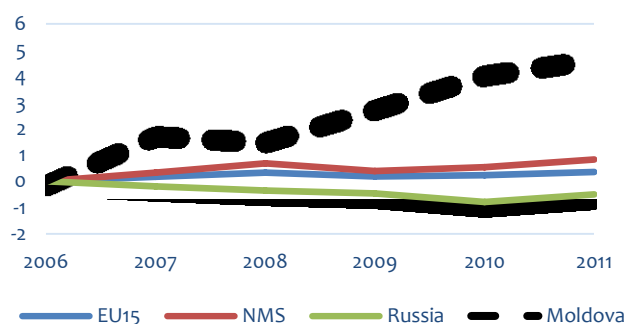
Fruit

Export

Fruit export trend in Moldova and related countries (2006-2011)

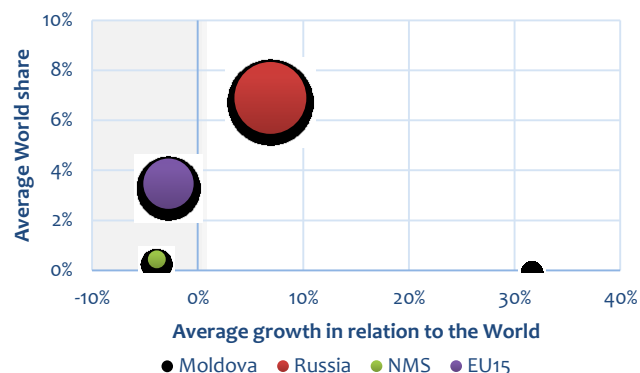


Fruit export trend in selected countries (2006=0)

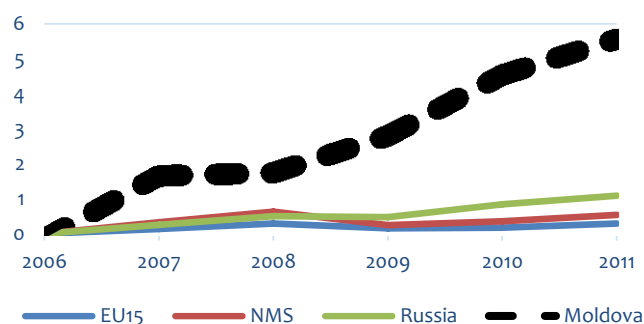


Import

Fruit import trend in Moldova and related countries (2006-2011)



Fruit import trend in selected countries (2006=0)

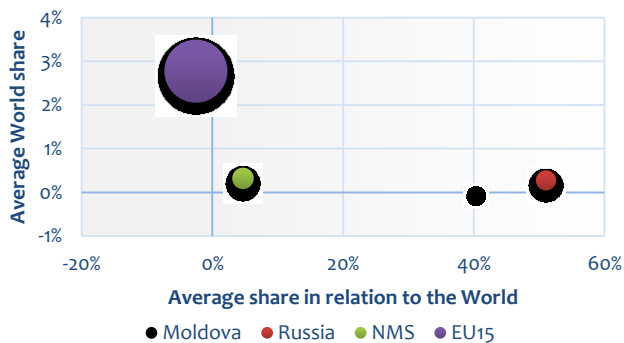


Source: FAO

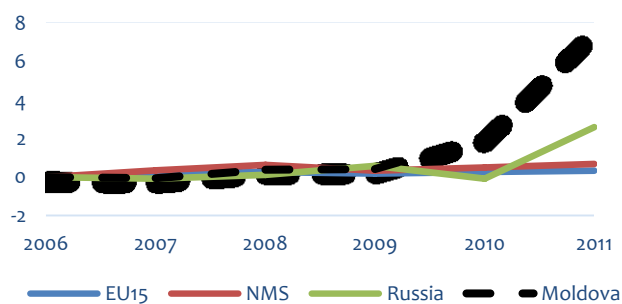
Vegetables

Export

Vegetable export trend in Moldova and related countries (2006-2011)

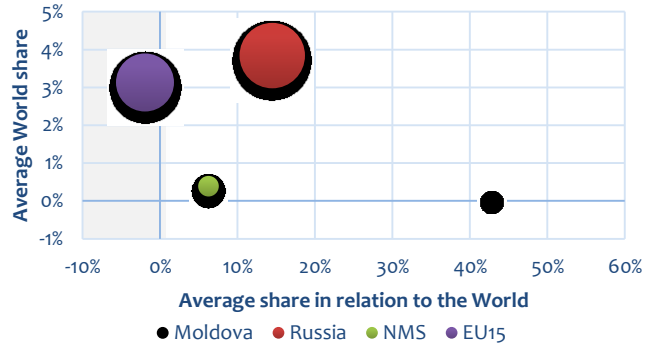


Vegetables export trend in selected countries (2006=0)

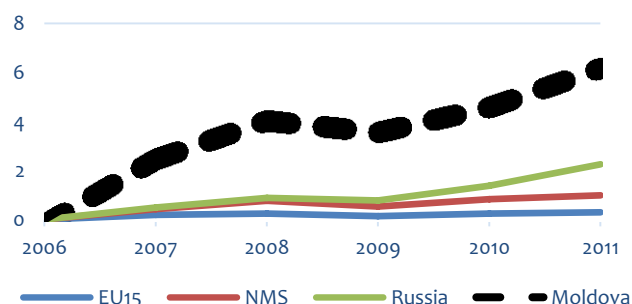


Import

Vegetable import trend in Moldova and related countries (2006-2011)



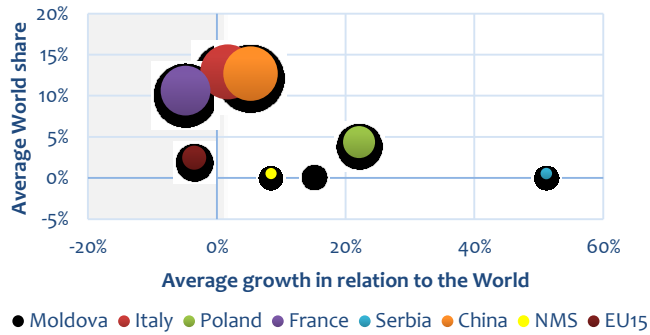
Vegetables import trend in selected countries (2006=0)



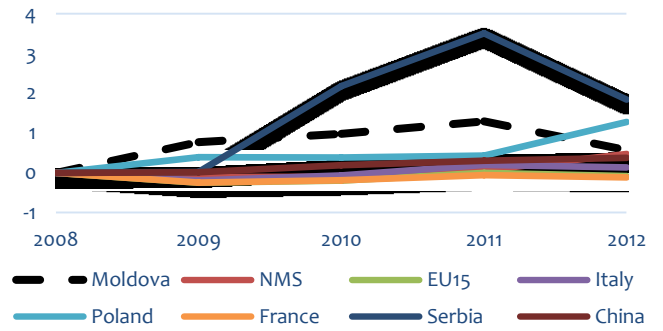
Source: FAO

Export of products

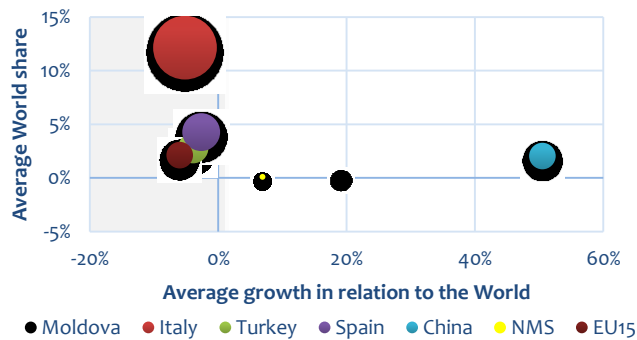
Apples export trend in Moldova and related countries (2006-2011)



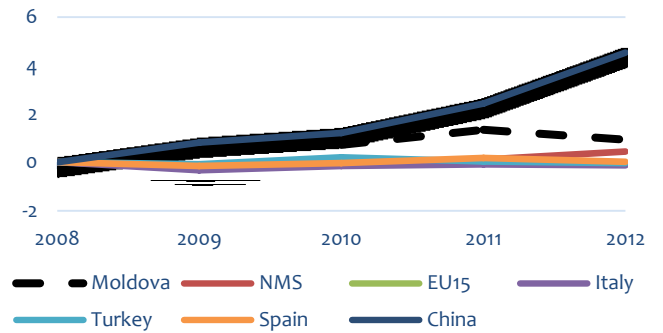
Apples import trend in selected countries (2006=0)



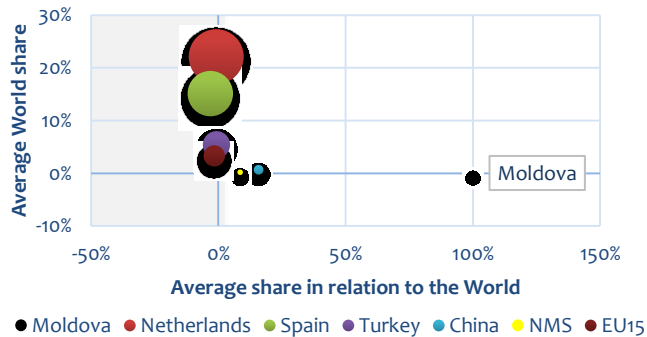
Grapes export trend in Moldova and related countries (2006-2011)



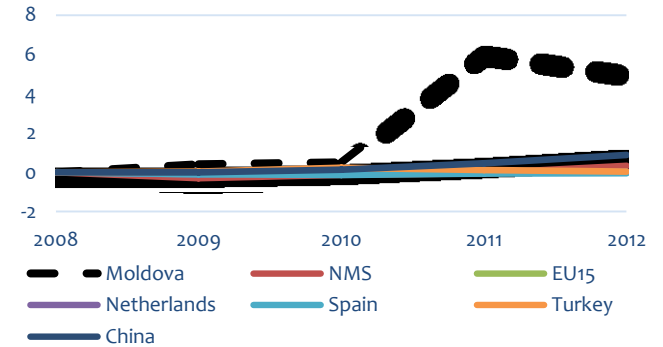
Grapes import trend in selected countries (2006=0)



Tomatoes export trend in Moldova and related countries (2006-2011)



Tomatoes import trend in selected countries (2006=0)



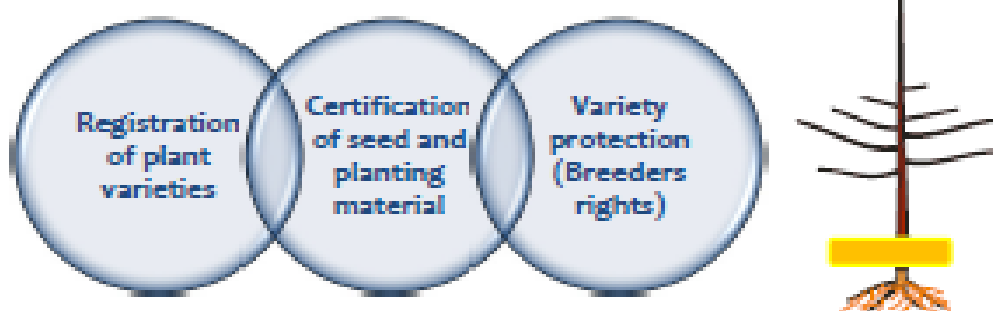
Source: FAO

Appendix 1 – Consultant's Presentation for Ministry of Agriculture Officials

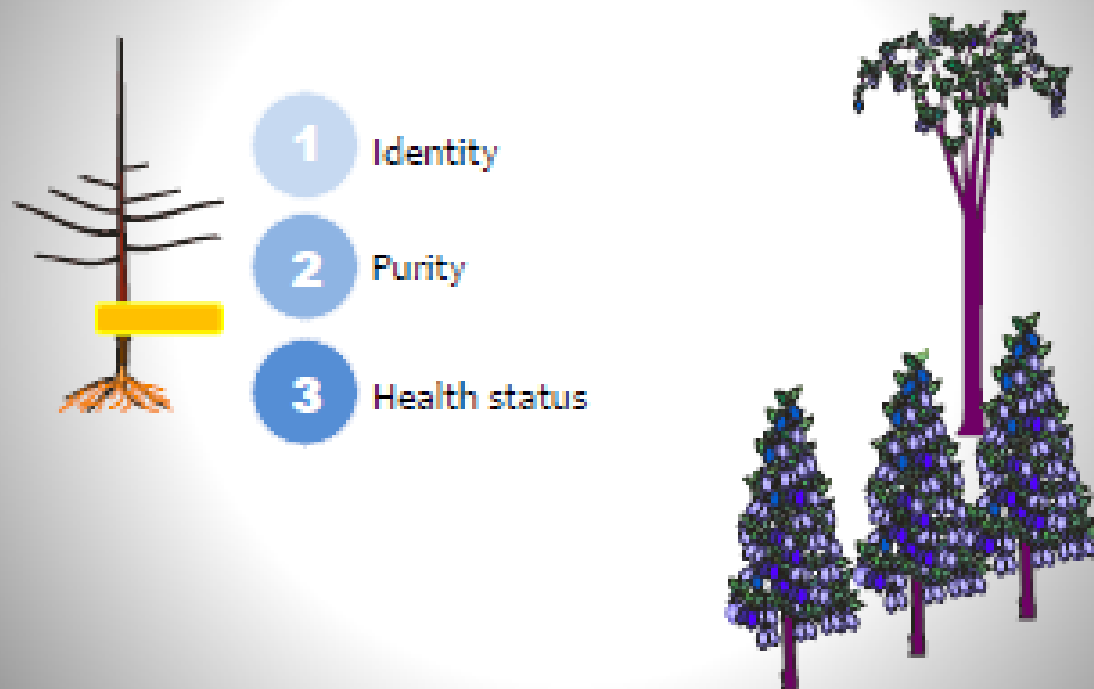
Option for changes in Moldovan system of fruit variety registration to
improve sector competitiveness



Variety registration is a minor part in unique tripartite system



Government role is at the label



EU system – general principles

- 1) varieties has to be listed in National catalogues and than in EU (Common) catalogue (for agricultural and vegetable crops) to be marketed

the purpose - to be sure that characteristics are clearly identified

- In order to be listed, the varieties have to be Distinct, Uniform and Stable (TESTING FOR IDENTITY)

(agricultural crops must be tested for their value for cultivation and use (VCU))

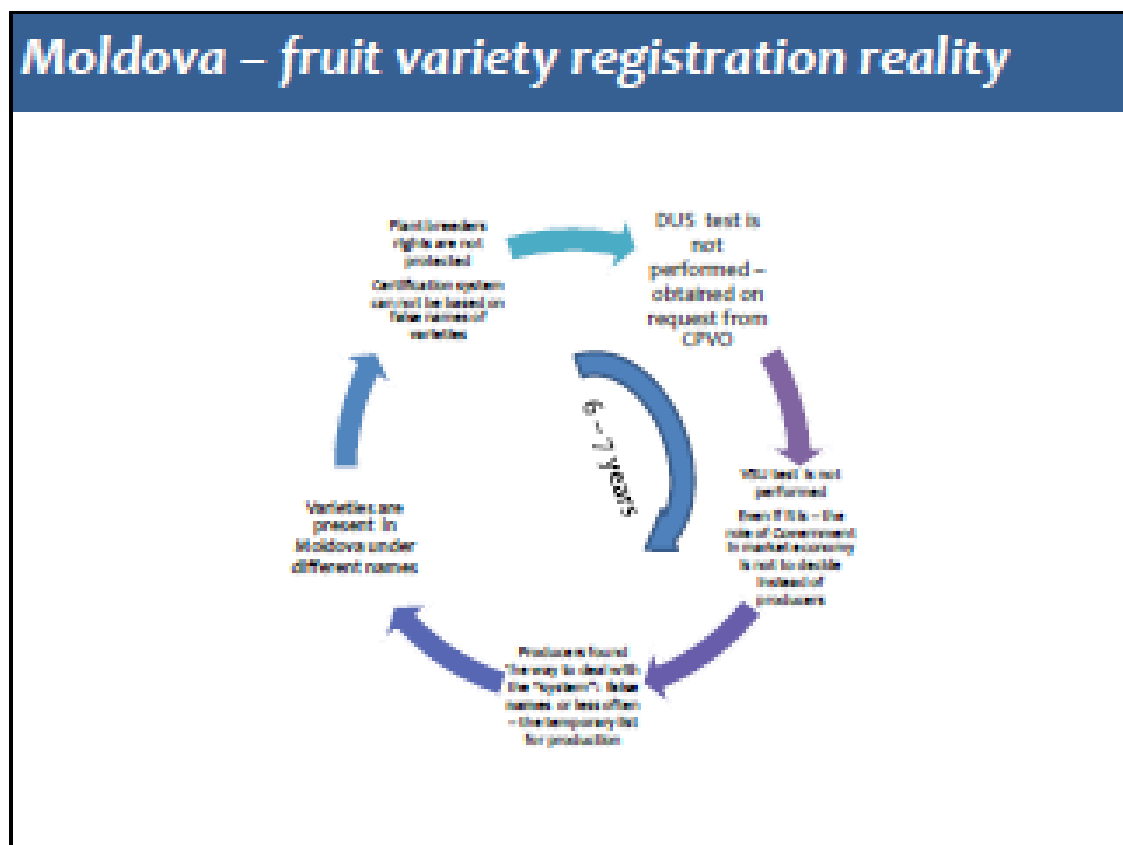
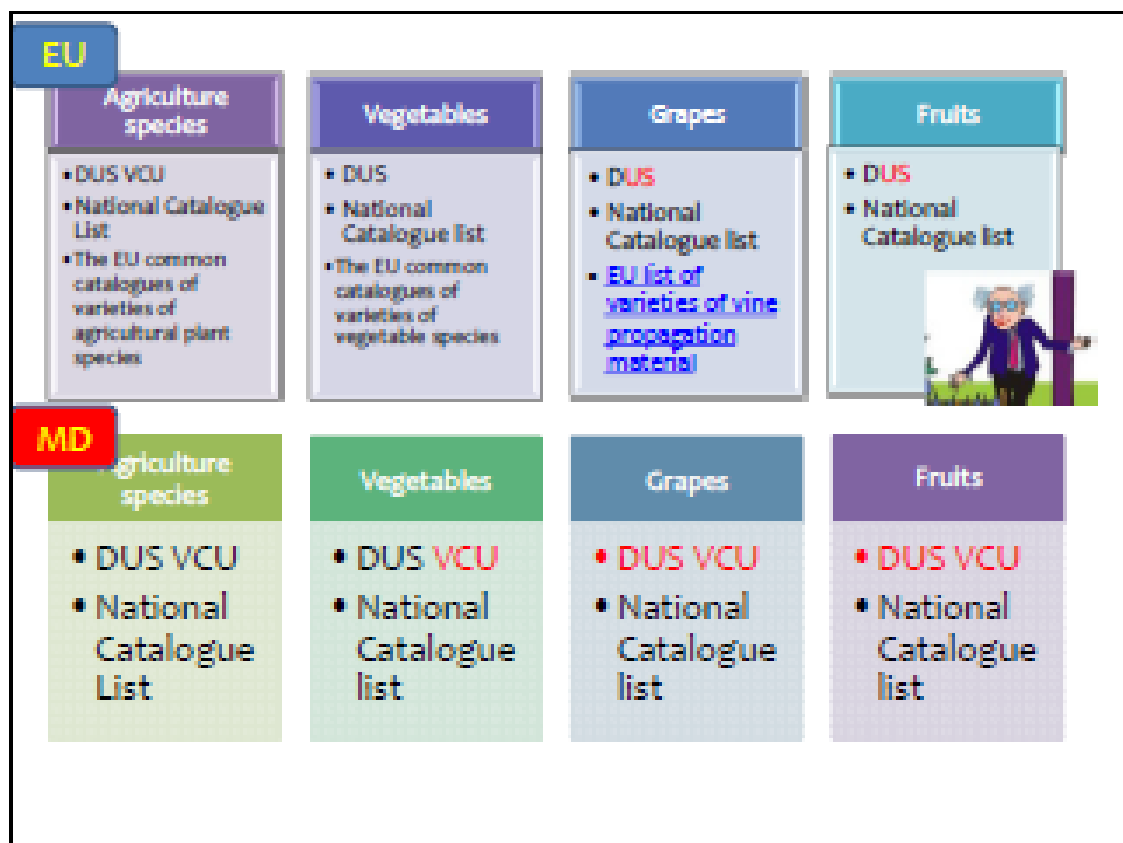
- 2) lots of seed and propagating material are subject of certification on the basis of official testing or testing under official supervision

- 3) registration of suppliers
(because material carry suppliers label)

Easy to understand and accept

Economic
and social
environment

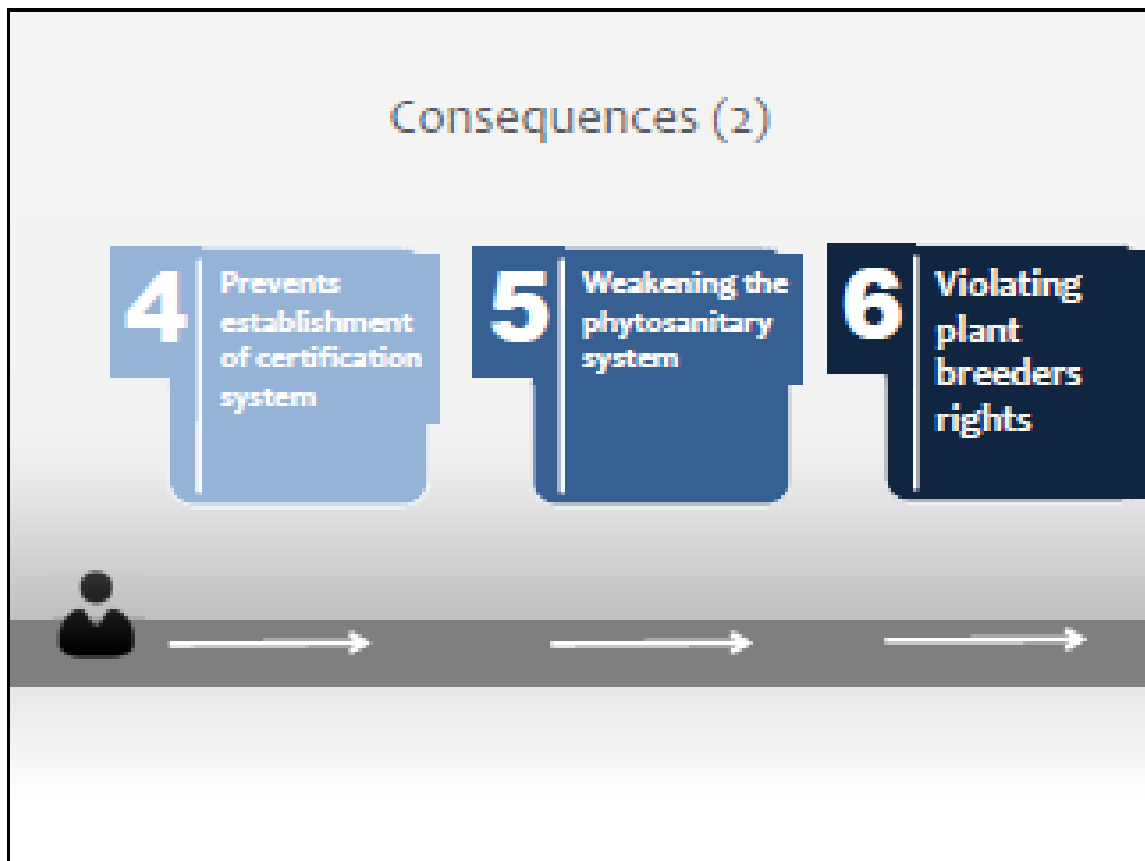
Difficult to implement



Consequences (1)

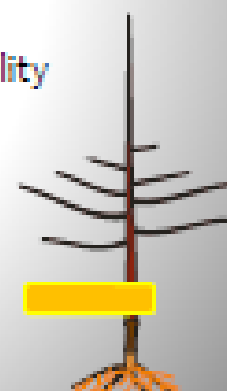


Consequences (2)

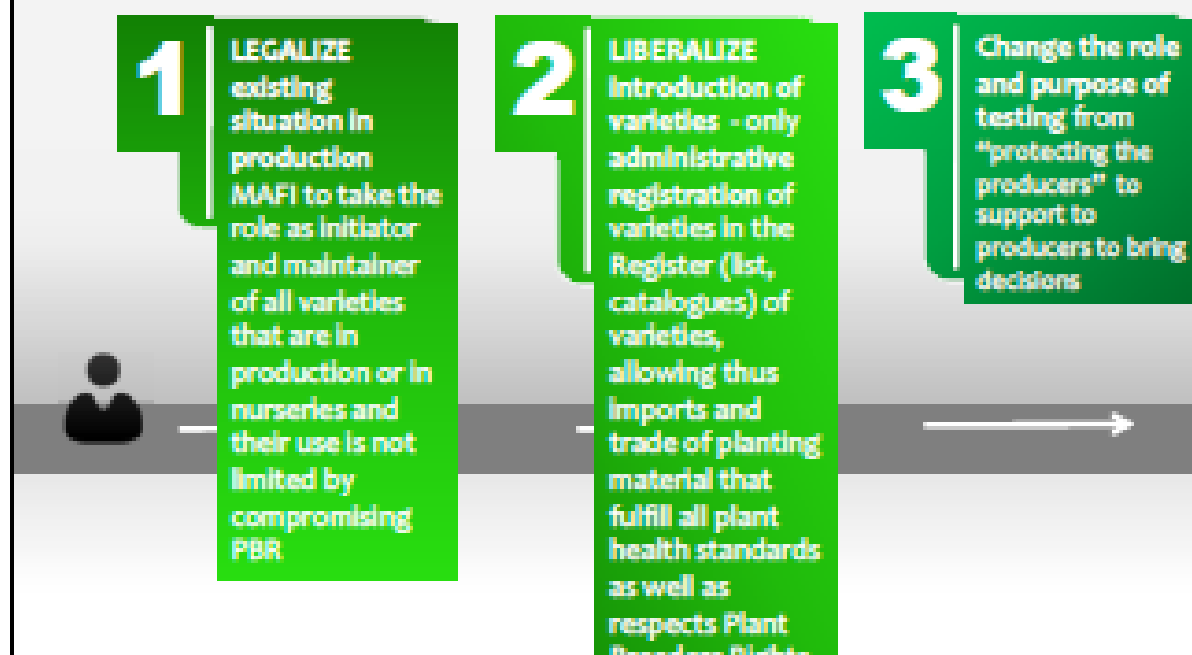


"You can avoid this reality,
but you can not avoid the consequences of avoiding reality. "

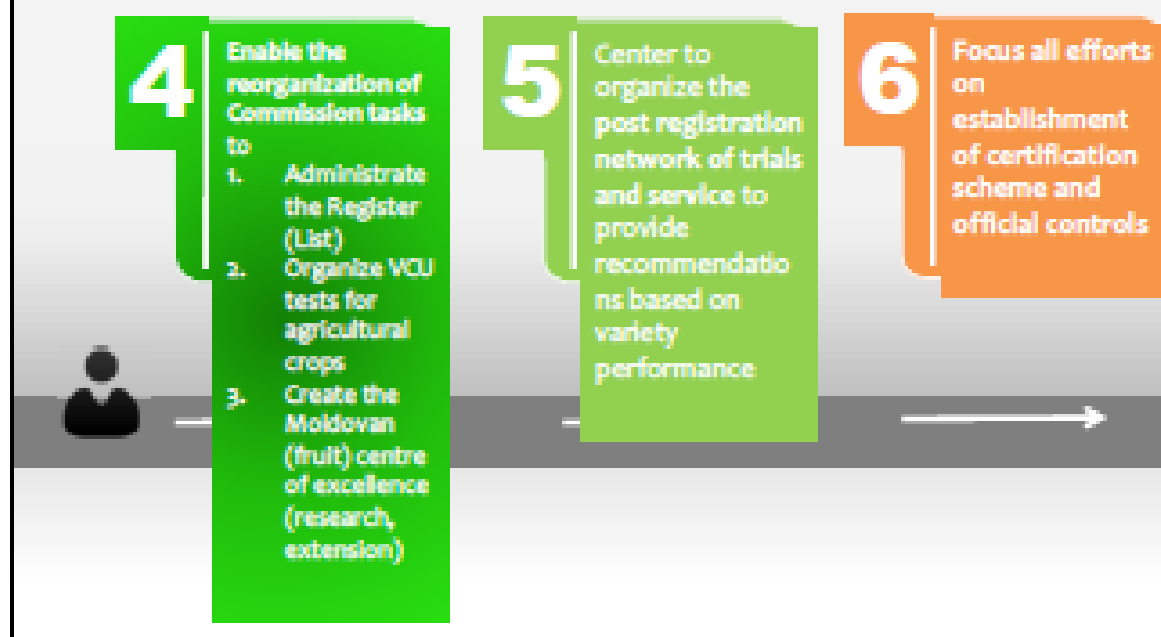
- 1 Status quo
- 2 Abolishing the regulation
- 3 Modifications, adjustments to reality



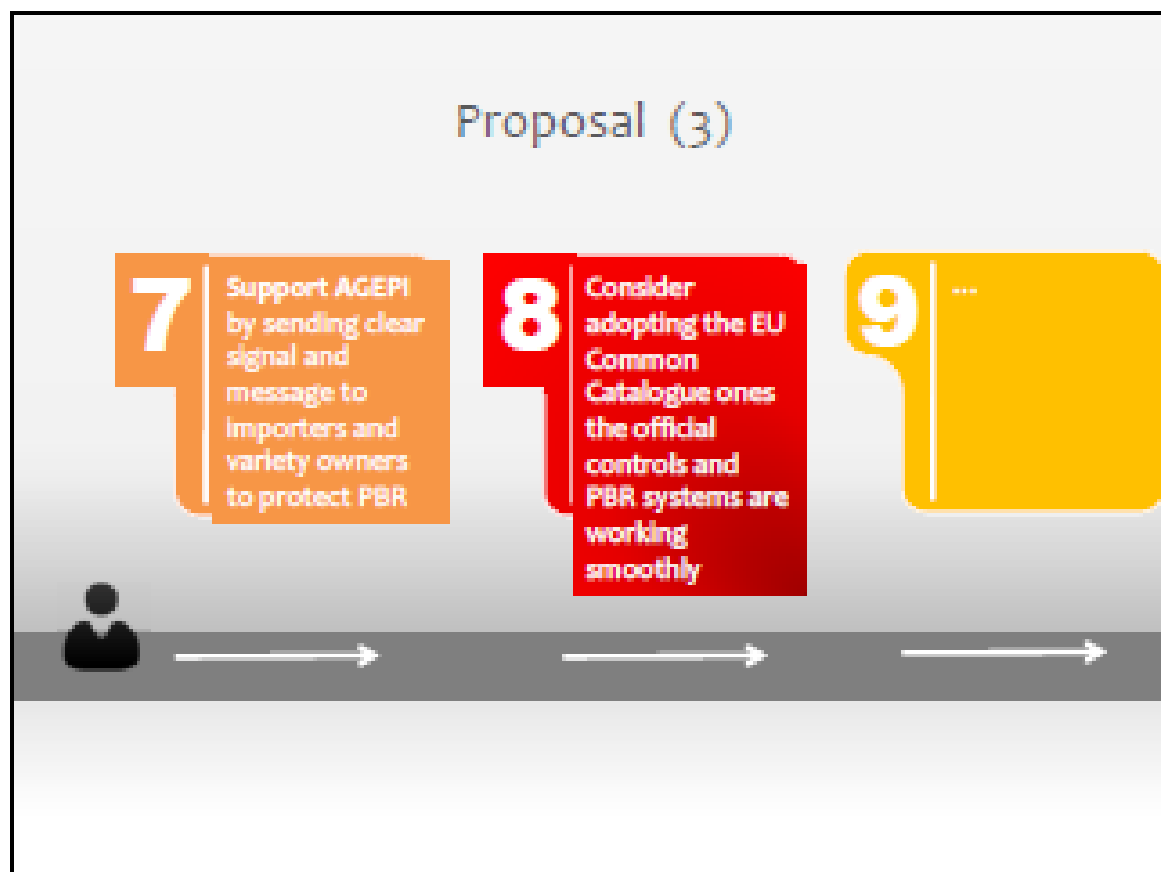
Proposal (1)



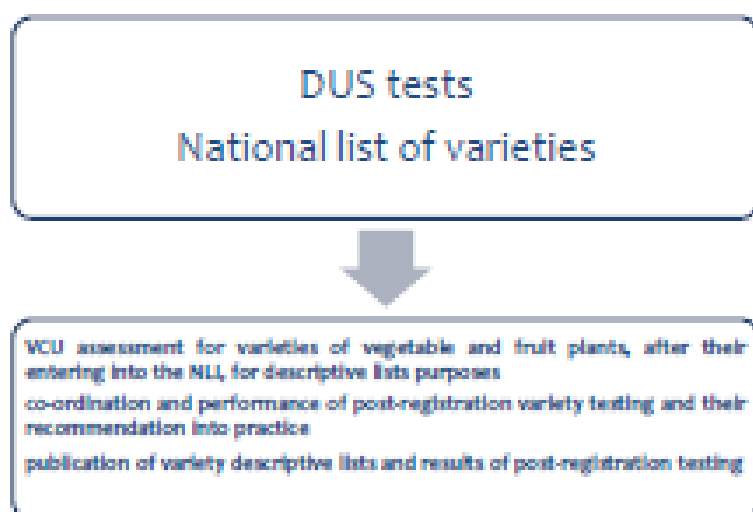
Proposal (2)



Proposal (3)



Option – inspired by Poland Post- registration variety testing system



Option – inspired by Poland Post- registration variety testing system

- The Research Centre for Cultivar Testing (COBORU) in Słupia Wielka, has developed and adapted variety testing and assessment to a market-oriented economy and the EU norms and standards. Within these activities COBORU has developed a new nation-wide variety testing system, called post-registration variety testing (PDO). Program PDO was officially accepted (Seed Act, 2000) and is presently implemented in all administrative units (Voivodeships) in Poland under the guidance and co-ordination of COBORU.
- PDOiR is the variety testing system operating on the regional level to help Polish farmers to select the most adapted varieties for different agricultural conditions and for the processing industry.
- In this open and flexible system, the cooperation of all parties interested in varietal selection and usage (e.g. Agricultural Chambers, Advisory Services, Breeding Companies, Seed Producers, Unions of Producers, Processing Industry and other interested institutions) is a norm.
- In the growing season 2011/2012 near 1000 different PDO field trials with major crops were carried out, and about 60% of the trials are financed from non-budgetary sources.



Option – inspired by Poland Post-registration variety testing system

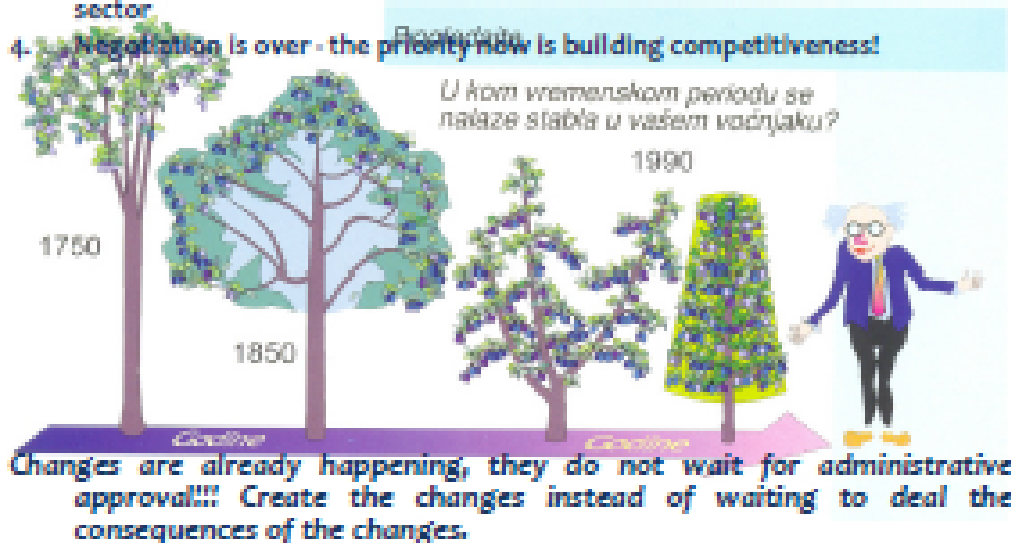
Benefits of PDOiR:

- regular collection of reliable data about newest commercial varieties and their performance under different growing conditions; this information is used for recommendation of varieties in each voivodeship
- facilitation for farmers to make an accurate choice of the most suitable varieties for their farming conditions
- in the longer term will assist in the evaluation of the flow of varieties from the EU Common Catalogue into Polish agriculture

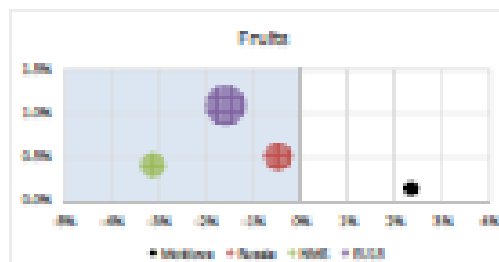


Summary (personal note)

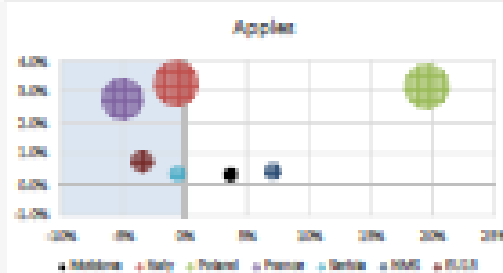
1. Free trade makes countries richer – in theory & in practice
2. There are more winners than losers – but there are always losers
3. The future for Moldova is already clear – great prospects in fruit growing sector
4. Negotiation is over - the priority now is building competitiveness!



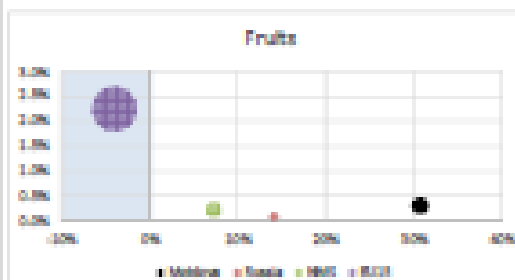
Production



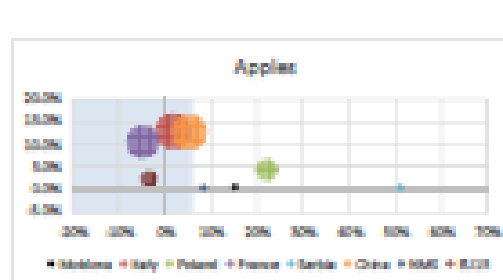
Production



Exports

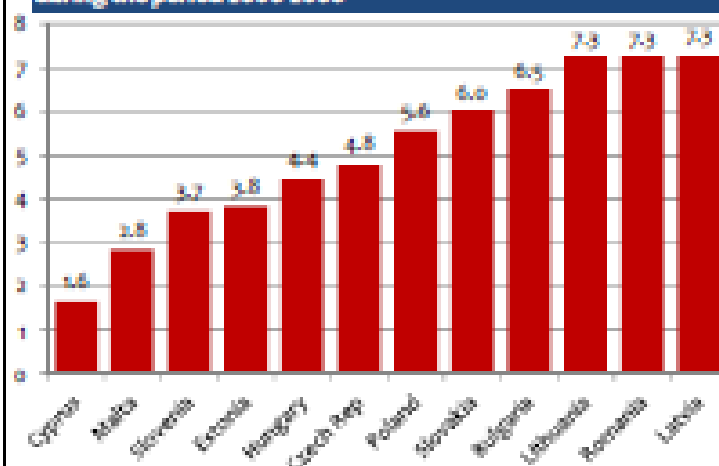


Export

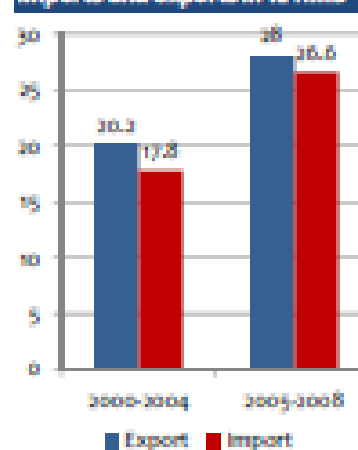


The enormous improvement of trade

Index of the overall increase of trade in agricultural products during the period 2000-2008



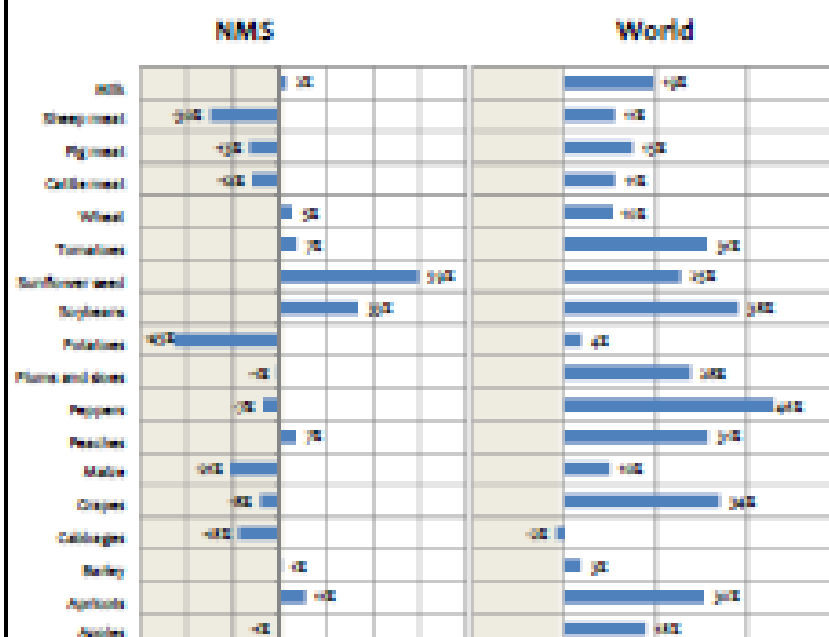
The average annual growth in imports and exports in 12 NMS



Experience of all new EU member states is increase of agricultural trade in both directions after liberalization and especially after joining the EU

Complete changes at the level of production

A comparison: the average of 1998-2002 and 2006-2010 average



Complete changes at the trade level

A comparison: the average of 1998-2002 and 2006-2010 average

